

APPARATUS FOR ANALYSIS OF A NUCLEIC ACID AMPLIFICATION
REACTION

ABSTRACT OF THE DISCLOSURE

- 5 An apparatus for determining a threshold value (e.g., a
threshold cycle number or a time value) in a nucleic acid
amplification reaction comprises a detection mechanism for
measuring, at a plurality of different times during the
amplification reaction, at least one signal whose intensity
10 is related to the quantity of a nucleic acid sequence being
amplified in the reaction. A controller in communication
with the detection mechanism is programmed to store signal
values defining a growth curve for the nucleic acid
sequence, determine a derivative of the growth curve, and
15 calculate a cycle number or time value associated with a
characteristic of the derivative.